

DESCRIPTIONS OF SOME NEW SPECIES OF
SYRPHIDÆ

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This paper is a continuation of studies begun several years ago on the Syrphid flies in the collections of the Museum of Comparative Zoology, which I have been privileged to study through the courtesy of Professor Nathan Banks. In the paper are included notes and descriptions of recent additions to this large collection.

Syrphus melanostomoides n. sp.

Male. Length 9.5 mm.

Head: eyes touch for length of vertical triangle. Vertex, front and face dark shining black or brownish, the front above the shining bare callosity over the antennæ brownish pollinose. The face, except for the shining tubercle and a narrow stripe running upward to the antennæ, pale brownish, white pollinose. Cheeks and edge of oral margin, except in front, brownish yellow to fulvous. Tubercle of face rather prominent with considerable concavity below the antennæ. Pile of vertex and front black. Pile on upper face dark, on lower face white. Occipital pile white up to angle of excavation. Antennæ short, entirely black; first and second joints subequal, third not quite as long as first two combined. Arista thickened on basal four-fifths, bare. Eye facets slightly enlarged. *Thorax*: dark shining brown or black, rather convex on the dorsum; pile quite long, sparse, very slender, dark in color. Pile on scutellum similar but even longer. Ventrally directed fringe of pile on scutellar margin pale colored. Mesopleuræ and an area on the dorsal suture with a band of conspicuous yellow pollen, which is pale pilose. Halteres and squamæ light brown; lower lobe bare. Humeri and metasternum bare. *Abdo-*

men.: black, obscurely shining. First segment metallic, the segment with a small semicircular yellow brown spot, its round side directed medianly, outer side straight. Third and fourth segments similar but with larger spots, except those on the third are more nearly triangular and the rounded angles again are medial, but the greatest length of the spot is vertically arranged on the segment; the spot on the fourth segment in contrast to the third, is placed transversely, but is angular—the angle placed medially. None of the spots touch the sides, and all are widely interrupted. The spots of the second segment may be wanting and on the fifth segment there may be more traces of yellow. Pile of abdomen long on the sides, pale in color, almost wanting on the surface but the surface is thickly beset with black, appressed, very short hair or bristles. Sides of abdomen parallel, much inrolled. *Legs*: black, tarsi very dark brown, extreme base of fore tarsi and apex of femora light brown. *Wings*: pale brown, stigma darker.

Female. Length 9 mm. Front shining black, on the lower part brown pollinose, with a faint median groove. Long pile of abdomen, thorax and scutellum wanting. Abdominal spots apparently wanting.

Eleven males from Tjibodas, Mt. Gede, Java, 9,000 ft. (Bryant and Palmer); one male, Seliban River, Mt. Apo, Mindanao, Sept. 17, C. S. Clagg). I place here provisionally, two females, Pangrango Mt. Java, 9000 ft. (Bryant and Palmer). Type and paratypes in Museum of Comparative Zoology. Paratypes also in the author's collection.

***Baccha banksi* n. sp. (Plate 10, Fig. 4)**

Male. Length 10-12 mm.

Head: eyes touch for more than the length of antennæ. Vertical triangle a very acute triangle, rather convex, anteriorly opaque black, shining posteriorly. Ocelli crowded into anterior part. Eyes cut away behind the vertex leaving the occiput at mid-vertex and on either side unusually thick. Pile in the midline of vertex thick, short, black, but immediately on either side becoming longer and white. Front rather convex; pile short, sparse, black. Antennæ quite short, third joint rounded, all of a brownish yellow color. Arista

darker, basally thickened. Facial tubercle fairly prominent, quite pointed; it and a widening stripe upward to antennæ shining black. A large triangular spot or callosity above antennæ, enclosing on each side a small yellow spot, shining black. Remainder of face and cheeks bright shining yellow, with a trace of white pile on the former. Mid occipital excision large and conspicuous. *Thorax*: black, moderately shining with suggestions of four narrow brown pollinose vittæ. Pleuræ vitreous black with sharp, pale yellow spots continued as a narrower stripe on the dorsal suture. Scutellum pale yellow, dully shining, narrowly black in the corners. Pile of dorsum erect, microscopically short, except for the anterior collar of pile. No ventral scutellar fringe. *Abdomen*: slender and elongate, terminal segments two and one-half times as wide as second. The second segment scarcely constricted anywhere; six times as long as wide. First segment black, its sides basally yellow. A suggestion of a small brown spot on the black second segment on each side of the middle. Remaining segments dark brown or black, shining, with yellow brown marks; on the third, on either side, a wide acute V, its sides thick, its ends sharp. On the fourth segment a long slender vertical spot near the midline on either side and lateral to this a shorter anteriorly placed, elongate spot. Posterior margin of fifth segment yellowish brown. Hypopygium long, nodular, rounded at tip. Abdomen thickly, short, black, bristle-covered. Abdomen larger than wings. *Legs*: coxæ and trochanters brown, femora black to brown, with apices narrowly yellow. Fore tibiæ dark brown, apices and base yellow; mid and hind tibiæ entirely dark, except basal third which is yellow. Tarsi brown, fore and mid basitarsi yellow. Pile of legs short, black. Mid femora slightly thicker than post femora. *Wings*: hyaline, whole marginal cell brown, whole costal cell yellow.

Female. Quite similar to male. Costal cell brown. Black of the face ascends to vertex, leaving each side of front narrowly yellow.

One male and one female, Bella Vista, Panama (Nathan Banks). Type male, in the collection of the Museum of Comparative Zoology. Paratype female in the collection of the author.

This species traces to *B. brevipennis* Schiner in Dr. Curran's key.

***Chrysogaster gewgaw* n. sp. (Plate 10, Fig. 11)**

A small species obviously related to *Chrysogaster shannoni* Cur. and to *C. neotropica* Shannon. Characterized by its yellow tibia and basal two tarsal joints and glittering greenish silver color with its four copper stripes on the thorax. The third antennal joint is shorter than in *shannoni*, the front not so long, besides other differences. The wing picture, eye maculation and yellow tibixæ distinguish it from *neotropica*.

Male. Length 4 mm.

Head: eyes actually touching for a very short distance, but appear to be contiguous for the length of the vertical triangle, or length of second antennal joint. Vertical triangle considerably elevated, slightly longer than wide. Front short, not as long as second joint of antennæ, deep coppery brown, greatly pitted and rugose. The rugæ continue to be prominent and transverse on the sides of the shining coppery face, except that there is a vertical smooth unwrinkled band running from below antennæ to the base of the oral prominence. Oral margin in front produced as a small rounded knob, excavated deeply and sharply above; in this respect it must resemble *shannoni* Curran. Eyes marked with two vertical bands, looped and folded in a way suggesting a bow-knot. Occipital rim or margin very narrow, practically absent. Cheeks narrow. Antennæ light yellow, dark brown on the third joint just past arista. Arista pale, extremely delicate, basally thickened and reaching just past third joint. First joint not half as long as second; second and third joint subequal. Pile of face sparse, quite short, pale, inconspicuous. *Thorax*: rich, coppery, finely rugose with four prominent dark brown vittæ and traces of another on each outer margin. Scutellum coppery, finely punctate or wrinkled, its rim faintly impressed, its edge rounded but slightly squared. Pleuræ coppery. Halteres pale brown. *Abdomen*: disk of abdomen dull shining brown. Sides of abdomen (and the hypopygium especially so) glittering, brassy in color. *Legs*: all the femora, except their narrow

yellow apices, glittering brassy in color. Tibiæ and tarsi, except the last three tarsal joints, pale yellow. *Wings*: with brown spots in the cross veins, in the middle of the marginal cell, middle of first posterior cell, tip of third longitudinal vein and a prominent cross band running down the wing from the termination of second longitudinal vein.

Two males, Soledad, Cuba, May 24, 1925 (George Salt). Type in the Museum of Comparative Zoology.

Lathyrophthalmus obtusus n. sp.

Male. Length 10 mm.

Head: upper facets enlarged, touching for twice the width of the vertical triangle, the latter nearly equilateral, much elevated. The ocelli standing out conspicuously. Front gently convex, dark brassy brown, with yellow-grey pollen, bare in the center. Antennæ situated about the middle of head, entirely light brown. Arista similarly colored, bare, two and one-half times length of third joint. Face with a small oval knob, bare, gently concave below antennæ, brassy black in color, densely yellow pollinose. Cheeks shining and bare, except for a narrow pollinose stripe. Spots of eyes small, two to three times as far apart as wide, clustered into an obscure horizontal band about the middle. *Thorax*: brilliant brassy or coppery with four yellow pollinose vittæ and a fifth exceeding narrow medially, the three central ones connecting with a transverse band before scutellum. Scutellum shining, varying from light yellowish brown on its rim to dark at base. Pile of thorax and scutellum upright; long, yellowish and black hairs intermixed. Pleuræ bears a conspicuous diagonal stripe, pollinose, from before wing toward fore coxæ and a spot high above mid coxæ. *Abdomen*: opaque black, first segment brownish yellow, blackish in middle and narrowly on posterior edge. Second segment with two large yellow spots on basal edge, their hind borders convex and meeting centrally. Posterior border narrowly shining. Third segment and fourth with narrow diagonal yellow pollinose stripes not interrupted; posterior borders and lateral margins of these segments widely shining to metallic. *Legs*: femora shining black with apices narrowly yellow. Tibiæ and tarsi light yellow, distal ends of tibiæ

dark brown, mid tibiæ less so, hind tibiæ entirely dark brown except the narrow base. Tarsi yellow except last three black joints of hind tarsi. *Wings*: hyaline, stigma cream colored, brown at either end.

Three males. Buitzenborg, Java (Bryant and Palmer). Type in the Museum of Comparative Zoology.

***Psuedovolucella apimima* n. sp. (Plate 10, Fig. 5)**

Male. Length 14 mm.

Head: eyes touch for distance equal width of posterior ocelli. Front very short, with narrow median groove or line. Head and face produced deeply but very flat and not produced forward. Antennal prominence inconspicuous. Front and face and cheeks light pale brown, pale yellow pollinose, except for bare shining obtuse facial knob and pollinose, darker strips between cheeks and face. Antennæ brown, third joint half again as long as wide. Arista twice as long as third joint, densely plumose, pale brown, its rays long, forty to forty-two above. Eyes bare. *Thorax*: dull brown, obscurely shining, with exceptionally narrow whitish pollinose streaks on the suture. Pile thick, erect, pale, growing bushy on the pleuræ. Scutellum reddish yellow to brown, with bushy, dense, long, yellow pile. Squamæ and pleuræ light brown. *Abdomen*: light brown on first, second segments and dark blackish on the third and fourth, a brown band formed as two slender wedges on the second segment whose points meet medially and a convex brown band on the base of the same segment. On the third segment a single, uninterrupted, yellowish-brown band, narrowly reaching the sides, widest in the middle and placed on the anterior half of the segment. Pile of abdomen very short, appressed, yellow and longer on the base of the abdomen, bushy on the basal corners, yellow on the light bands, black with some yellow hairs on the dark portions. Hypopygium with scattered, long, black bristles. *Legs*: light brown, the hind femora much darker on the outer half. Pile of legs light in color, but sides of hind femora outwardly bear numerous, short, black bristles. Hind femora strongly thickened, greatest past middle, an accentuated concavity ventrally, due to a terminal knob. Hind tibiæ basally with a small

blunt knob. *Wings*: tinged with pale brown, darker about the stigma.

One male. Tjibodas, Mt. Gede, Java, 7800 ft., 1909 (Bryant and Palmer). Type in the Museum of Comparative Zoology.

A very remarkable resemblance to *Eristalis tenax* and to a honey bee. It is certainly very close to Shiraki's species *mimica*. Nevertheless, it appears to me that the hind femora of *apimima* are more strongly thickened and incrassate and that the arista has some forty dorsal bristles to twenty-four or twenty-five in *mimica*, judging by Shiraki's figure.

***Volucella nitidithorax* n. sp.**

A large shining black species with yellowish brown face and yellow tinted wings. It belongs to the *V. nigricans* group.

Male. Length 18.5 mm.

Head: eyes densely black hairy, the black pile of the vertex twice the length that of the eyes, fine and bristly. Front protuberant, small, black bristly. Antennæ and thick plumose arista orange brown, the third joint small, short, barely longer than broad and tapering quickly to a rounded point. The face has the appearance of being dark shining brown with a wide, shining, brownish-yellow middle stripe from base of antennæ to oral margin. Yellow stripe covered with numerous fine black bristles interspersed in which are a few pale ones, all beginning just above the tubercle. The tubercle or knob is prominent but flat, leaving the face deeply excavated below the antennæ. Occiput black, black pruinose, with very short black pile. *Thorax*: and scutellum shining black, covered on the former with very dense, erect, fine black, bristly hair. There are some quite long black bristles on the upper pteropleuræ, sides of thorax and scutellum. Humeri dark brown. *Abdomen*: dorsally and ventrally shining black, covered with thick, short, black bristles, quite appressed, a little longer on fourth and fifth segment. *Legs*: entirely black, black pilose. Hind femora quite slender. *Wings*: suffused with yellow. More prominent on the veins and brownish along the posterior terminations of the veins.

One specimen, Mt. Apo, Mindanao, Phillipine Islands,

Mainit River, 6500 ft., Oct. 27 (C. F. Clagg collector). Type in the Museum of Comparative Zoology.

***Volucella pallidithorax* n. sp. (Plate 1, Fig. 8)**

Female. Length 12 mm.

Head: face descending into a slender cone, quite pointed at apex. The tubercle prominent, leaving a concavity below antennæ but apart from the tubercle the profile of the face from antennal base to tip of epistoma is almost perpendicular. Front not wide; nowhere wider than length of third antennal joint, at vertex over three times the width of ocellar tubercle; the ocelli very small and close set. Head everywhere, except the posterior occiput, post vertex and above the cheeks, pale shining yellow. Antennæ entirely orange brown. Arisal rays long and loose, twenty-one to twenty-two above. Pile of eyes not half as high as vertical pile, the former pale, the latter black, merging into the long, pale, upright pile of lower front. Pile of face short, appressed, sparse, golden. *Thorax*: pale greenish yellow, a brown pair of stripes medially, stopping well before the scutellum, an outer pair black, interrupted at suture, pointed posteriorly, nearly reaching the scutellum. Pleuræ and scutellum pale yellow, the latter translucent with four very long, black bristles on either side not arising from noticeable tubercles. Four similar bristles on posterior calli, one on mesopleuræ and four on sides of mesonotum. *Abdomen*: pale yellow, translucent, a narrow black border posteriorly on the second segment, wider at the angles, with a suggestion of a narrow median streak. There is a wider similar border on the third, with a median black prolongation that reaches the anterior margin of the segment. The fourth segment marked much as the third. The yellow of the third reaches the margin very narrowly but on the fourth reaches the margin in full width; pile of yellow areas yellow, of black areas black. *Legs*: yellow, the bases of all of the femora, distal fourth of the fore and mid tibiæ and greater part of hind tibiæ and all its tarsi black. *Wings*: with a yellowish tinge.

One female. Honduras, Rosario Mires. Type in the Museum of Comparative Zoology.

Related to *V. prescutellaris* but the front is yellow, not

black, and is partly black pilose. The abdominal segments differ.

Phalacromyia bipunctata n. sp.

Male. Length 8 mm.

Head: eyes with upper facets enlarged, contiguous for twice the length of the second antennal joint, densely pale yellow pilose, their pile almost as long as depth of third antennal joint. Antennæ pale orange brown, the third joint at least twice as long as wide, rounded at the tip with a slight indication of a dorsal excavation. Arista yellowish with darkened apex and thirteen to fourteen bristles dorsally. Face and cheeks entirely pale shining yellow, the knob small and evenly rounded with a number of short yellow bristles and some longer yellow hair on the sides of the face near the middle. Occiput yellow, yellow pilose. *Thorax*: dorsum shining light yellow with faint indications of darker vittæ, the long, thick, erect pile and the lateral and scutellar bristles all golden yellow. Scutellum with a small brown spot on either side of the flat depression, the basal roughened areas slightly wider than long. Pleuræ yellow translucent. *Abdomen*: upon the base pale translucent, yellowish brown as far as the middle of third segment where the posterior edge of the light coloration is trilunate. Remainder of abdomen shining brownish or blackish. *Legs*: all the femora pale brownish yellow except narrowly at the tips, the tibiæ brownish, darker apically and the tarsi brownish. *Wings*: and stigma except a tiny brown spot at the base tinged with greenish yellow.

Female. Similar, a faintly suggested brown stripe on cheeks, a lunate depression in the middle of the shining yellow front. There is also a suggestion of brown at each basal corner of the scutellum where there is a rugose depression suggesting *Volucella chalybescens*. Abdomen subtranslucent greenish beyond the middle of the second segment. Tibiæ and tarsi somewhat more blackish.

Several specimens, Pastorea, Paraguay, Jan. 1922 (Donald Wees collector). Type, male, allotype female and paratype in the collection of the Museum of Comparative Zoology; three paratypes in the author's collection.

This species is very similar to Curran's species *circe* but is distinct I believe, in the different maculation of scutellum and abdomen.

Graptomyza flavorhyncha n. sp. (Plate 10, Fig. 6, 7, 9)

Male. Length 6.5 mm.

Head: sides of face and front parallel. Upper half of front and vertex shining black with a gentle concavity on the former marked by a lunulate depression on either side. Front above antennæ pale yellow. Cone of face long and slender, acute, marked by a narrow shining brown median stripe reaching antennal base; cheeks shining brown. Remainder of face shining pale yellow, vitreous. First and second joint of antennæ very short, third very long, flattened, tapering quickly from apex to a dorsal point, its upper margin narrowly brown. Remainder of antennæ light orange brown. Arista slender, long, short pilose, black on apical half, yellow basally. *Thorax*: and pleuræ shining dark brown. Humeri and the front of thorax to and including coxæ, a dorsally confluent spot on anterior mesopleuræ in front of wing, lateral calli and a thoracic band before scutellum light yellow. Pile very short, erect, sparse, pale.

Scutellum light brown, darker apically, with a curious and perfect oval depression lying transversely, its rim posteriorly short pilose, the margin of the scutellum with a few long black bristles, similar to others on post calli and sides of thorax. Halteres and squamæ yellow. *Abdomen*: light brownish yellow, subtranslucent, with a wide but dorsally invisible black, continuous, lateral margin. The following black markings occur on the abdomen: the apical border bands on the second and third segments, the anterior edges of which are trimammillate, a median wedge and a posterior point on the fourth segment, together with a rounded dash-like spot on either side of this segment. First segment wholly yellow. Abdomen very convex. *Legs*: light brown, the narrow base of all femora, apical half of fore tibiæ, median band of mid and hind tibiæ and fore and mid tarsi black. Hind basitarsi simple. *Wings*: uniformly yellowish brown. No spurs.

One male, Mainit River, Mt. Apo, Mindanao, Phillipine

Islands, 6000 ft., Sept. 14 (C. S. Clagg). Type in the Museum of Comparative Zoology.

Graptomyza setigloba n. sp. (Plate 10, Fig. 10)

Male. Length 6.5 mm.

Head: vertex and front polished, vitreous blue black, the latter with a semicircular crease or depression on each side, the convex edge of which it turned to the mid-line. Just above the antennæ the face, also vitreous, becomes light-brownish yellow and this is the color of all the remainder of the face and cheeks. Face descending into a long pointed cone, covered with a very few long pale bristles. Pile of occiput and front pale; of the vertex black. Eyes with very sparse pale pile. Antennæ, except for a narrow dorsal black band, entirely brownish yellow to yellowish orange outwardly. Arista long and slender, pale colored, ten rayed, the rays on the outer half only. The third joint is very long and broad and flat. It is pendulous and practically descends to the lowest level of the eyes. The apical bristles of second and third joints black. Occiput excavated, its margin not visible from lateral profile. *Thorax*: shining bluish black on the central dorsum, the humeri, suture, calli and the scutellum, except its brown central ellipsoidal depression, all shining clay yellow or brown. Pile of thorax and scutellum pale brassy, the bristles black. *Abdomen*: pale subtranslucent yellowish brown, marked with black. On the posterior border of the second segment there is a black triangle, the base on the border, the three angles of which are extended somewhat as narrow lines, the two antero-lateral faces of the triangle quite concave. Third and fourth segments largely black, the narrow anterior portions of these segments pale and the black of the third segment nearly meeting the second segment medially, but obtusely rounded off. The lateral margins of second, third and fourth segments narrowly black. Whole abdomen unusually globose. The bristles thick, semi-decumbent and black in color. Some short, pale pile on the basal half of second, third and fourth segments and the ventrally directed lateral fringe of pile is pale. *Legs*: brown, the femora and tibiæ pale yellowish

brown, the bases of the former and the tarsi very dark brown to black. *Wings*: pale yellowish. Stigma brown.

Two males, Mt. Apo, Mainit River, Phillipine Islands, 6000 ft., Sept. (C. S. Clagg). Type in the Museum of Comparative Zoology. Paratype in the author's collection.

Microdon aurigaster n. sp.

Male. Length 9.5 mm.

Head: entire insect, except antennæ, tibiæ and tarsi, dark shining brown, nowhere blackish. Antennæ light orange brown, elongate, third joint a bit longer than first and three times length of second. Arista short, concolorous, quite thickened at base; no pedicel. Vertex somewhat swollen, its pile, that of front and face depressed and golden and rather long. Face broad, transversely rugose and grossly punctate. Eyes sparse, short, pale pilose. *Thorax*: whole dorsum short, thick, greatly appressed golden pilose, visible only from the right angle, but with bands standing out at other angles as a transverse sutural band and a prescutellar band. Of these bands, only one-half (the right or left half) may be seen at one time. Scutellum short, inconspicuously golden pilose, with two small close set spines. Squamæ and halteres brown, the former with a golden fringe. *Abdomen*: apical corner of second abdominal segment, side margins of third, its narrow posterior margin and the whole of the fused remainder brilliant golden pilose, the pile much appressed and set as if it were flowing on each side in diagonal and opposed directions. *Legs*: pile of femora pale, the surface of hind femora deeply and grossly punctate. The tibiæ and tarsi light orange brown, remarkably densely covered (for tibiæ) with long golden bristles. Hind tibiæ in the middle and the thickened hind femora basally with diagonal cicatrices. *Wings*: on basal anterior border cream yellow, posteriorly grey; the yellow continuous apically, to bend down as a yellow spot towards the tip where on either side the wing (basally and apically) is a little darker grey; wing else where light grey. A spur is present from third longitudinal vein but nowhere else. The terminal section of the fourth longitudinal vein forms a most pronounced and prominent outward bulge.

One male, Bolivia, Province Sara (Steinbach). Type in the Museum of Comparative Zoology.

***Eumerus ergator* n. sp. (Plate 10, Fig. 3)**

Allied to *Eumerus deceptor* Cur. from which it is separated by the yellow colored pile of the front instead of white and the snow white, white-pilose terminal hind tarsi, besides minor differences. Like *deceptor* the scutellum is obtusely dentate.

Male. Length 11 mm.

Head: front and vertex quite rounded. Eyes almost touching at a point just below ocelli, escaping it by a distance equal to that between the upper ocelli. Face gently receding below antennæ, faintly concave. Cheeks narrow. Color everywhere shining brassy brown and everywhere, including eyes, very densely long yellow pilose but not golden. Antennæ light yellow. First joint very short, second twice as long, third large and evenly rounded, as long as broad. Arista yellow at base, thickened, blackish apically. Sides of the face parallel, slightly wider about oral margin. The aspect of the head strongly suggests a species of *Pipiza*. *Thorax*: pleuræ, scutellum and abdomen everywhere brilliant brassy and clothed with long, nearly erect, brassy pile. *Abdomen*: sides of abdomen and apex slightly copper. Sides of segment, with small, postero-lateral, inwardly pointed, yellow pollinose spots lying in a conspicuous trench or concavity. Third segment with larger similarly colored spots, directed obliquely forward to median line but widely separated and with straight median edges. Fourth segment without such pollinose spots but with a coppery impression still more obliquely directed, lying on each side. *Legs*: femora and basal two-thirds of hind tibiæ dark, golden brown with brassy pile; base of hind tibiæ, remainder of tibiæ and tarsi, except for the apical three tarsal joints of mid and hind tarsi, varying shades of light yellowish brown. The apical three joints of mid and hind tarsi are snow white with snow white pile. Hind apical tarsi without any dilatation suggestive of *E. peltatus* Meijere. *Wings*: uniformly pale brownish. Sub-apical cross vein remarkably angulated, both an-

gulations spurred. Angle of distal cell quite obtuse. Spurious vein not prominent.

One male, Mt. Apo, Mindanas, Phillipine Islands, Mainit River, 6,500 ft. Oct. 23 (C. L. Clagg). Type in the Museum of Comparative Zoology.

Cerioides delicatula n. sp. (Plate 10, Fig. 1 and 2)

This is very similar to *Cerioides bezzi* from which it differs in the longer abdominal pedicel, abbreviated yellow band on posterior border of third segment, slightly longer antennæ, annulate hind femora and other minor differences. It traces to *bezzi* in Curran's key to the genus.

Female. Length 13 mm. including antennæ.

Head: front and face and vertex black, marked with yellow and punctate. On either side of vertex there is a small spot connecting each eye corner with the occiput, a narrow longitudinal stripe beginning just below the ocelli, two diagonal ones just above antennæ, two lunate spots on either side of antennæ, a slightly larger spot below this one and between the latter are two diagonal spots which fall just beneath the antennæ. Finally there are four short facial stripes, the inner two running diagonally from the direction of antennæ and converging to a point above oral margin, the outer two diagonally running from eye margin to lowest point of oral margin. The cheeks are yellow, interrupted by a brown triangle. The yellow face markings may be bordered by brown. The face is gently convex above the oral margin in profile. Pedicel of antennæ practically absent. First joint almost as long as last two, yellowish at base, blackish apically. Second and third about equal, the second black, the third brownish. Style pale. The vertex is slightly raised and the front bears a grooved depression which might perhaps be likened to an X. Occiput black and punctate, except about the cheeks. *Thorax*: and scutellum dull black, thickly punctate. Humeri, a narrow sutural stripe not confluent in the middle and the narrow posterior edge of the scutellum light yellow. Halteres, knob and pedicel ivory white. The pleuræ are black and punctate except for a long narrow diagonal yellow stripe reaching to the dorsal suture and a shorter cuneiform yellow spot behind and in front of

the metanotum. *Abdomen*: black, everywhere thickly punctate, the middle of the second segment brownish, the post border of this segment completely and of the third segment incompletely in the center with narrow pale yellow bands. First segment half as long as second, third a trifle shorter than fourth and first two segments a trifle longer than third and fourth, if viewed laterally. The yellow bands encircle the venter and the sides of the last ventral segments are emarginate. The first two segments are very slender, and the last two suddenly swell at base of the third into a compact subglobose body amazingly suggestive of certain wasps. The third and fourth segments are thus fused and the fourth bears faint whitish interrogation marks. *Legs*: brown, marked with light yellow, the basal and apico-dorsal and medial parts of the first femora, last two fore and mid tarsi, base and ventral surface of mid femora and a basal annulus of hind femora are light yellow. Legs punctate. *Wings*: margined with yellow, a darker spot apically and a smaller one about the stigma.

One female, Camerouns, Mete (G. Schwab). Type in the Museum of Comparative Zoology.

Cerioides multipunctata n. sp.

Allied apparently to *Cerioides tredecimpunctata* Brun, to which it traces in his key. It differs in the reddish color of abdomen, additional spots on thorax, besides minor differences.

Male. Length 15 mm. including antennae.

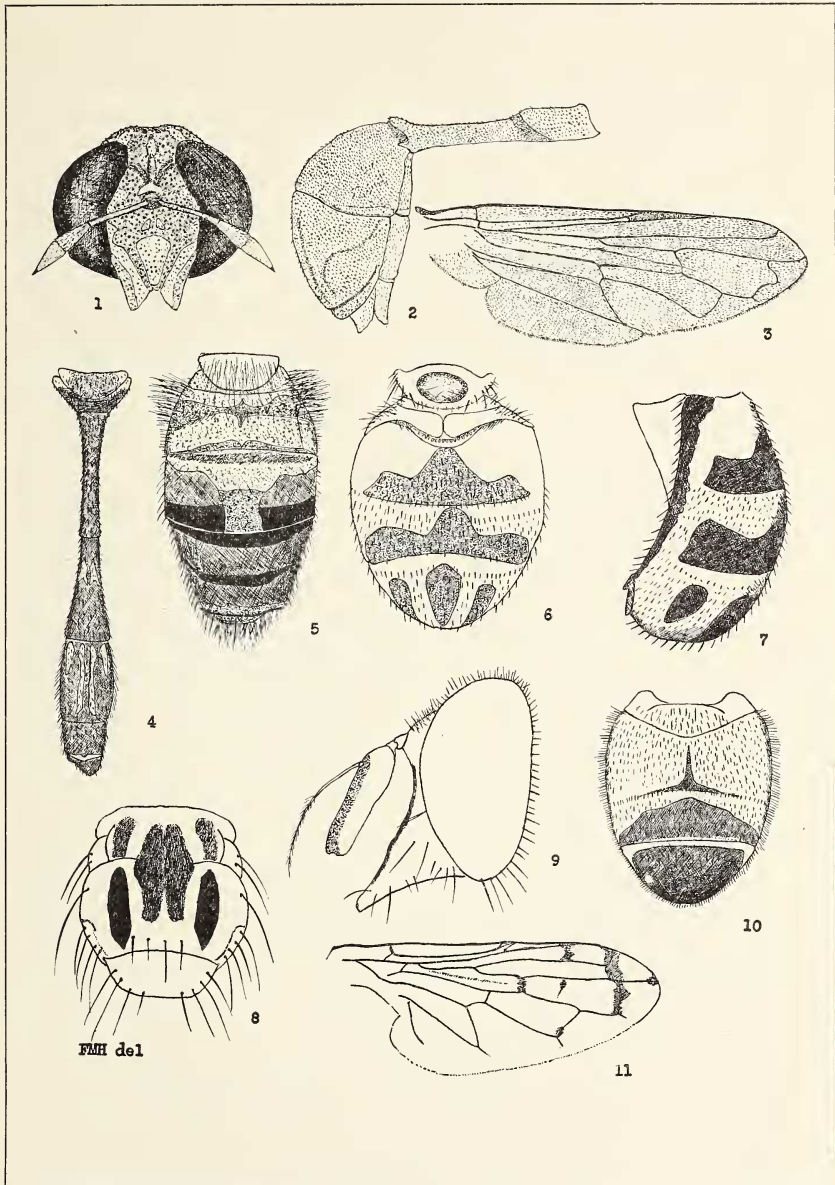
Head: eyes touching for distance of front, which is short. Vertical triangle very swollen, yellow, confluent with the swollen and thickened upper occiput. Face pale yellow. A median black stripe, red on its lowest part, encircles the base only of the antennal process and sends out a black diagonal downward projecting spur toward but not reaching the eye. Cheeks yellow, separated from face by a wide black stripe, the middle of which is a reddish stripe. Antennæ pedicel as long as first and second joint, the first barely longer than second. The second and third subequal, the color reddish brown; first and second joints slightly darker than the third; style whitish. *Thorax*: black, ground color of pleuræ black.

A spot on suture, narrow sutural stripe medialward, post-lateral stripe to scutellum, scutellum, except narrow base, humeri, mesopleuræ, metapleuræ, spot on upper sterno and pteropleuræ pale yellow. Squamæ and halteres pale yellow. *Abdomen*: outer basal angle of first abdominal segment noduliform, conspicuous postal borders on third and fourth segments, a narrow one on second pale yellow. Remainder of abdomen light brownish red, except the first segment, the remainder of which is black, and there is also a small median black spot posteriorly on the second segment. Fifth abdominal segment wholly reddish. *Legs*: reddish or light brown. Basal half or third of femora, bases of tibiæ yellow. *Wings*: with anterior border of brown.

Two males, Koolos, India (Carleton). Type male in the Museum of Comparative Zoology. Paratype in the author's collection.

EXPLANATION OF PLATE 10.

1. *Cerioides delicatula* n. sp. (face)
2. *Cerioides delicatula* n. sp. (lateral view of abdomen)
3. *Eumerus ergator* n. sp. (wing)
4. *Baccha banksi* n. sp. (abdomen)
5. *Pseudovolucella apimima* n. sp. (abdomen)
6. *Graptomyza flavorhyncha* n. sp. (dorsal view of abdomen)
7. *Graptomyza flavorhyncha* n. sp. (lateral view of abdomen)
8. *Volucella pallidithorax* n. sp. (dorsum of thorax)
9. *Graptomyza flavorhyncha* n. sp. (profile of head)
10. *Graptomyza setigloba* n. sp. (abdomen)
11. *Chrysogaster gewgaw* n. sp. (wing).



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